The claims defining the invention are as follows :

1 A turbine or rotor that consists of a central hub or shaft rotatable about an axis generally parallel to a fluid or gas flow supporting a plurarity of integrally formed blade / vane units radially arranged around the said hub or shaft that each comprises of substansially outwardly extending blade or " wing " sections preferably having a slight rearward inclination (0 - 45 deg) towards the gas / fluid flow exit direction , a flat , convex or most preferably an airfoil shaped surface generally facing towards the rotation direction normal to gas / fluid flow exit direction , supporting and integrally formed with on its most outer frontward extremities , a substansially frontwardly (leading into the incoming flow) projecting " vane" of pronounced length and preferably a diminishing convex or " airfoil shaped " surface generally normal to the resultant gas / fluid flow as well as generally facing the direction of rotation with the complete blade / vane unit being set onto the hub / shaft section with a helix or pitch angle formed between the outer blade / vane extremities and the said hub or shaft axis enabling lift or deflection forces formed by the said gas / fluid flow past the blade / vanes to revolve the turbine or rotor about its central axis .

2 A turbine or rotor as claimed in claim 1 that always has the frontwardly projecting outer vane section . of the same or longer length (measured from its outer tip to the centroid of area of the complete integral blade/ vane unit) than the length of the inner blade section from the same said centroid so that the outwardly exitting flow area or area of voids between its outer vanes periphally is always more than one third of the total exitting gas / fluid flow area.

3. A turbine or rotor that has its integral blade / vane units balanced within usefullness given the application , both in weight distribution about a central line passing through their centroid perpendicular to the hub / shaft axis and also the sum of moment or twist forces formed by lift or deflection forces about either side of the same said central line equal unless an unbalanced situation is desired to come into effect above a given flow velocity thereby giving rise to vane / blade flex and thus , maximum rotational speed control .

4. A turbine or rotor with the majority of cross sectional profiles of each specific cross sectional area of its integral blade and vane units as claimed in claim 1 preferably set at an angle of incedence of between 0 and 35 degrees and most preferably always between 0 and 15 degrees from the resultant gas / fluid flow past that same specific area irrespective of their cross sections or dimensions at the same specific area .

5. A turbine or rotor with its integral " blades / vanes" as in claim 1 radially displaced around a hub or shaft in a permanently fixed helix or pitch angle that produces lift or deflection forces of the said blade / vanes generally towards the direction of rotation upon gas / fluid flows through the turbine or rotor whether or not that incoming flow has been given a helical path by preceding stationary vanes or rotating rotors , unless able to be articulated about their individual mounting point central lines onto the hub / shaft to such an extent as to enable ultimate " speed limiting " or benefitting " start - up " conditions when loaded .

6. A turbine or rotor with blades and vanes as claimed in claim 1 that may or may not contain there- in one or more narrow " slots" that have at their respective rearward exits a smooth curve , radius or air -foil section also having its own incedance angle to flow , in an effort to add to the maximum " lift " forces in the vicinity of the specific areas of the vane / blades where they are situated and those slots are preferably orientated normal to the gas / fluid flow past the same area that they are located in .

7. A rotor as claimed in claim 1 that has on its blade / vane units as described in claims 1 to 4 a convex or air foil surface generally facing opposite the direction of rotation and opposite or negative angles of incedance through-out its various sections as claimed in claim 4 , such that when a torque is applied in the direction of rotation as claimed in claim 1 , a gas / fluid flow may be imparted in the outwardly and rearward direction , irrespective of the number , pitch angles or direction of rotation of the various stages .

8. A turbine or rotor as claimed in claim 1 that has the greatest proportion of its blade blade / vane surface area situated between 0.3 - 0.45 of the diameter radially from the central axis of rotation

9. A turbine or rotor as claimed in claim 1 that may be used in an inline or multyple axial multy - rotor turbine arrangements where the rotors may not necessarily revolve on the same shaft , hub or in the same direction .

10. A turbine or rotor as claimed in claims 1 through to 9 that may have its integral blade / vane units constructed of solid , partially solid or hollow , airfoil , flat , concave or convex cross sections with any number or mixture of these provided they still fullfill the aero dynamic forces and mass distribution requirments as claimed in claim 3.

11. A turbine or rotor as claimed in claims 1 through to 10 that may be constructed of metals steel , alloys , composites , plastics , resins , laminates , organic materials , timbers with any combination of these , using any number of any of the following methods :

Laminated ,cavity moulded , injection moulded , roto moulded ,vacuum formed , pressed , cut, cast, inserted, blown , sinted , forged, bolted , rivetted , welded , fabricated , glued , ultra sonically joined or machined , either as one complete unit or as assembled from a number or pieces .

12. A fan or rotor as herein before described with references to Figures 1 - 7 of the accompaning drawings.

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